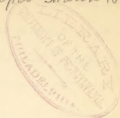
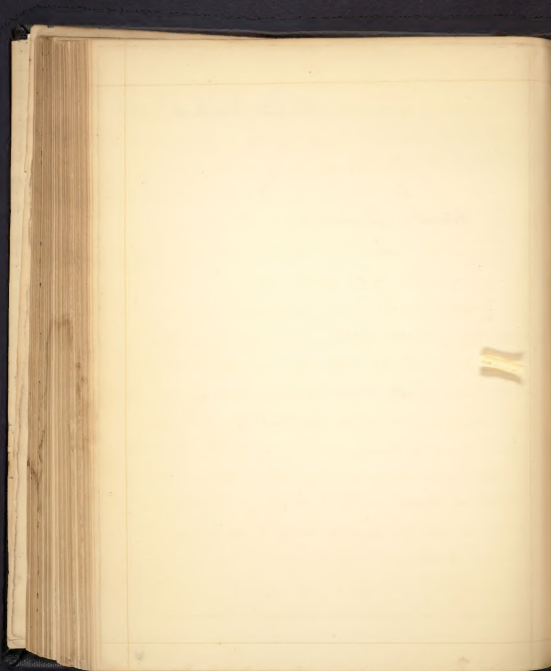


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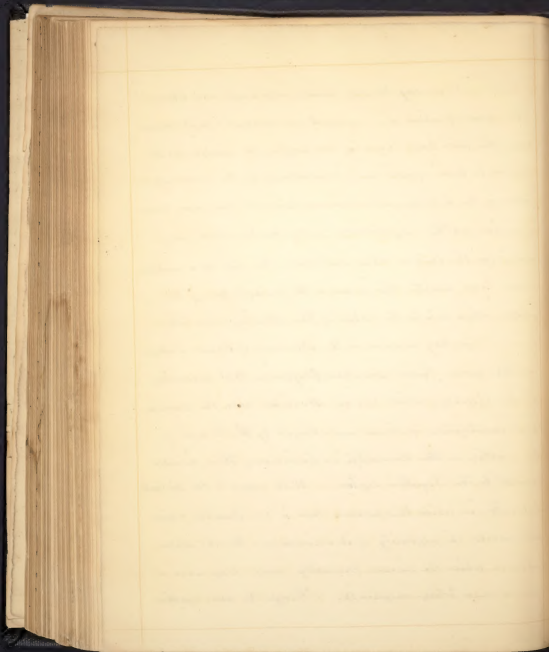
An  
Inaugural Dissertation  
on  
Dysentery  
By  
Isaac Hall  
of  
North Carolina



17

Typhoid has been divided into acute and chronic the former of which it is my object now to treat. But considering the term acute Typhoid not sufficiently specific, as it appears to have reference more particularly to the local affection of the intestines, without designating the particular kind of action, whether Inflammatory or Typhoid which may prevail in the system, I have instituted this last as a subdivision and adopted the former as the modification of the disease which is to be the subject of the following dissertation.

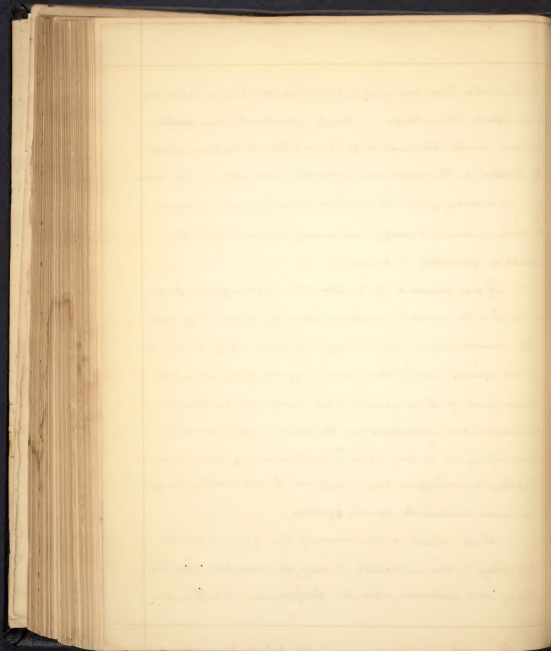
Typhoid agrees with the Nosology of Cullen is classed in the Genus Pyrexia and order Profluvia. But according to the Nosology which has been established upon the anatomical investigations of Bichat and taught by the Professor of the practice in this University, we find it among those diseases incident to the Digestive System. With respect to the district of country in which this prevails, there is no situation which can preclude the possibility of its occurrence, as the the circumstances in which the disease frequently arises, may derive it from a source totally inexplicable. Though the above question



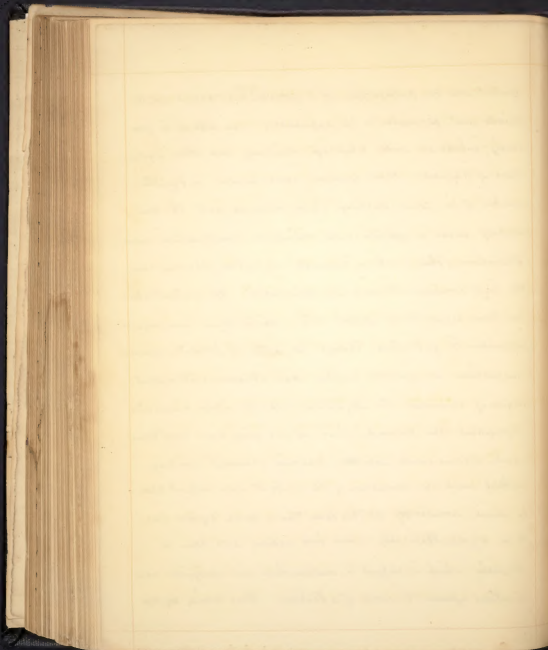
be true, still there are certain situations much more obnoxious  
to its attacks than others. Marsh effluvia and sudden  
changes in the temperature of the weather have been regarded  
by Authors as the causes most frequently productive of this disease  
and are accordingly found it sometimes occurring as an endemic  
in those sections of country, most amply provided with the  
means of generating these agents.

It was considered by Cullen as a contagious Fever  
attended with unusual discharges from the alimentary canal  
with considerable Torpida and Lousmus, but of the truth  
of this opinion few of the present day are confident. The  
circumstance of its occurring as an occasional Epidemic  
dependent upon atmospheric situation would show the  
inimistancy of looking upon it as produced by specific con-  
-tagion, a contagion being supposed to be a matter *diagen-*  
*-ois* and inimitable in its nature.

With respect to the season of the year at which  
Typhenteria is most prevalent it may be remarked that the  
Spring and Autumn when the vicissitudes of weather are



greatest and the putrefaction of Vegetables <sup>most</sup> rapid are the periods most favourable to its appearance. An attack is generally ushered in with Chillsings shivering and other symptoms of Pyrexia. These sometimes occur however as symptomatic of the local discharge which comes on first. The alimentary canal is affected with considerable constipation and Flatulence, (This is not an invariable symptom, Diarrhea being the first sometimes to make its appearance.) The patient about this time begins to be affected with griping, pain and frequent disposition to go to stool. Though his efforts to produce copious evacuations are generally abortive and attended with great degree of Tenismus. In conjunction with the above mentioned Symptoms, the Stomach which as yet may have been tranquil becomes much disturbed, Anorexia ensues, vomiting disturbs much the composure of the patient and subject him to much uneasiness. At this time the arterial system has been sympathetically called into action, and there is Pyrexia which is subject to exacerbations and remissions and sometimes assumes the form of a Tetanus. These forms symp-

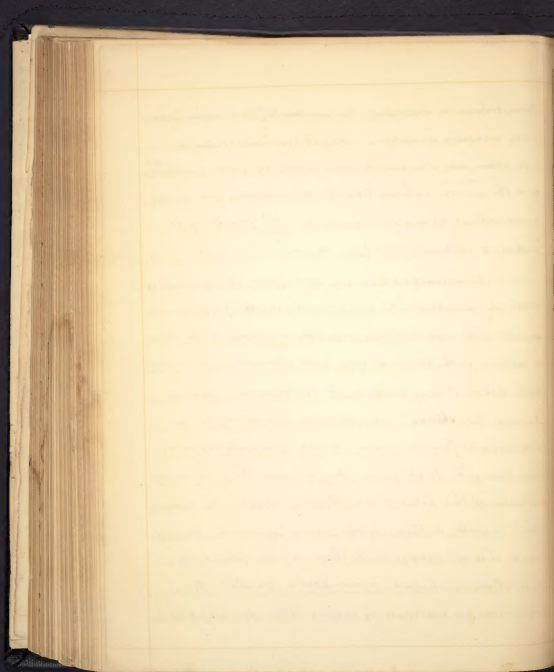




-tion continues to accompany the disease, whose course, gradually increasing in violence, until it terminates fatally.

In other cases the constitutional febrile symptoms <sup>are</sup> gradually, and the disease continues topically for sometime, and finally ceases without having sensibly affected the strength of the patient or materially deranged his health.

The discharges which take place from the Alimentary canal are variable, with the different periods of the disease and are still more differently imprefixed, according to the degree of violence with which it may have attacked, and the force with which it may maintain its continuance. Generally however they ~~obtain~~ <sup>obtain</sup> the following appearance, in the commencement they are simple mucus, gradually becoming streaked with blood, until they acquire the uniform consistence of this latter fluid, differing only, in the tenacity which is given to them by the presence of mucus. This difference does not always mark them as pure arterial blood is sometimes discharged in considerable quantity. These evacuations are modified by various other appearances, which



that of blood, generally the, are very foetid as is indicated  
 by the smell, sometimes purulent, or having strong resemblance  
 to pus, and frequently faeces which is the evacuation of parts  
 that have been destroyed by the Ulcerative process & gangrene.  
 Adventitious Membranes formed by the effusion of coagulable  
 Lymph are sometimes coarctated, then attain the cylindrical  
 form of the intestine to which they bear so strong a resemblance  
 as not infrequently to induce a belief that it is actually a  
 part of the intestine which has sloughed. These Abscesses  
 are similar to those which are said sometimes to be found  
 in Gout. Though the stools above described are very fre-  
 quent, it is seldom, that the natural Faeces are discharged  
 and when they do appear, it is generally in very small quan-  
 -tities, assuming the form of small inflated balls to which  
 the name of Scybala has been given. These evacuations  
 always retain temperature, the disagreeable symptoms, and  
 support the great disposition to get the Stool.

With these local affections. The appearance of the patient  
 would vary greatly, with the degree of action which might



6  
hormis in the general nervous system, though this be now  
-ganglion of all the parts might be immense and death quick  
-by terminat the nerve, but should it be mild, the local dis-  
ease need not impress with much fear of danger immediately,  
as it may continue for a considerable time without much  
injury to the patient, But we should never be careless with  
too much confidence, as there is no security against an exacer-  
bation of the constitutional symptoms and eventually of  
death. The disease may terminate with a gradual resor-  
-tion of all the Typhoid symptoms, or it may degenerate  
into a chronic Typhoid, or Febrile, which may continue  
for a considerable time and become a source of great annoyance  
to the comfort and ease of the patient, the fever during  
all this time although the inflammatory symptoms be absent  
is generally chronic and tense and rarely of that well rolling  
appearance to the touch, which generally characterizes it in  
similar local affections of other parts, & figures

Delirium is not a frequent symptom in this disease  
nor at this should we be surprised since the occurrence,



if the Intestine is so great, and the blood so much determined to it, as to preclude much action in the brain, the patient may sometimes exhibit the symptoms of partial mania, but if strict attention be paid, it will be found to proceed from the excruciating pain in the alimentary canal, by which the functions of the Brain are impaired, and not, from any inordinate determination of blood to that organ.

The causes of Dysentery of which some have been previously mentioned may be divided into two classes, those which act immediately upon the mucous coat of the alimentary canal producing the disease directly will constitute the first class. While those which act upon the skin producing it indirectly will constitute the second class. Contagion as a cause of this form of the disease I have previously discarded and whether in any of the forms it is ever generated my limits will not suffer me to investigate.

To the first of the above mentioned classes may be referred all substances of an indigestible nature whether of Diet or of substances accidentally admitted into the Stomach.





It is also upon this organ that harsh vicissitudes are supposed to act. To the same class may be referred more particularly vicissitudes of temperature in the atmosphere, and succeeded by cold, or any other cause which might interrupt the cutaneous circulation, and cause the blood to flow, with more force, in greater quantity, to the internal viscera, In this latter case the redundant blood in inferior loci, as it were, would become a source of irritation to the mucous coat, by which a constant determination would be invited to it.

From the great vascularity of the mucous coat of the alimentary canal the mucous membrane of this first class of causes may be easily understood, This Membrane is by most anatomists at the present day supposed to be a continuation of the skin forming the internal coat of most of those cavities which open externally, and to present, nearly similar appearances both in structure and function whenever it occurs. Hence the same mode of action & phenomena <sup>occurs</sup> when a foreign body comes in contact with this membrane forming the interior that does intervene when a similar body



the secret of relation is presented to it as it exists in the eye  
 There is at once a copious secretion of mucus or of a watery  
 fluid which is inferior to the mucus, and the body  
 thus circulating and is at the same time a species of depletion  
 which is inhibited by the vitality of the part in order  
 to relieve itself of congestion. Thus even the duration of  
 the application only temporary, the power of nature would  
 be amply sufficient to obviate disease and the effect  
 would no longer be sensible when the exciting cause was  
 removed, but this not being practicable and the irritation  
 of the part gradually increasing the quantity of blood de-  
 termines to it becomes augmented the vessels are enlarged  
 lose their contractile power, and thus is established topi-  
 cal inflammation with which the general arterial system  
 sympathizes and thus is established the disease in question.

The operation of the second class of causes may appear,  
 somewhat ~~unintelligible~~, upon a superficial view, but  
 if the demonstration of Bichat previously alluded to be  
 regarded as correct, and the continuity of the vessels and



nerve, of the serous membrane and skin also admitted  
 the principle upon which these causes produce disease  
 is at once developed and renders easy of explanation  
 As I shall be under the necessity of again alluding to these  
 two agents in the subsequent part of this paper, I will now  
 enter more particularly into a detail of those changes  
 which take place in the functions and actions of the  
 system in general when exposed to their influence,

Heat and cold appear to produce a topical effect  
 wherever applied and disease results not from any specific  
 power in either or other, but from an inequality induced  
 in the circulation, by which important vessels suffer  
 and the particular disease produced, depends upon the  
 comparative strength of the vessels that which is weakest  
 and least liable to sustain the shock being most liable  
 to be diseased, Hence we sometimes have catarrhs when  
 the Lungs are most civilized, and  $\frac{1}{2}$  prostrated when  
 the Intestines are most deficient powers Heat & cold con-  
 - sidered as a precipitating cause or as weakening the internal



viscera by determining the blood from them, to the surface where I suppose it to be applied, cold on the other hand is an exciting cause or acts by determining the blood from the surface to these viscera. Thus circumstanced.

The first communicating a centrifugal the latter a centripetal force to the circulation. The Phenomena which are observed when the system is exposed to the incandescent action of heat are such as fully to confirm the position which I have stated. In the first place there is an unusual turgescence of the capillary vessels of the skin thus exposed, secondly there is an attempt made by the system to relieve itself of this, by the sweating process, which is instituted and continued so long as defence on its part is necessary against this deleterious agent, deleterious as its direct tendency is to destroy the parts exposed to it,

In conjunction with this increased action of the vessels of the skin, it is held by some that the action of all other parts is also increased as in the *Stomachicæ* *ferment*; but to this I object for two reasons, 1<sup>st</sup> that after sweating is once





induced heat does not come in contact with the body but in a very partial degree, and secondly that such an action would be inconsistent with the intelligence of the System. This first assertion might appear somewhat paradoxical to those unacquainted with those principles of Philosophy which are so frequently developed in the Physics, <sup>not</sup> but as I am now addressing persons not thus circumstanced, I would merely refer to the principle of evaporation, which must necessarily be induced by that fluid which is placed between the body and the surrounding medium, by which it will be rendered inert and thrown in a latent state into the atmosphere. The truth of this I consider still more apparent from the cooling sensation which is always experienced upon the accession of perspiration. ~~That only on this we~~  
Heat is local in as much as it is applied to the skin which is only a part of the membrane formed by it and the mucous membrane, if we irritate a point in the skin we increase the action in that point alone



the action of the parts around is not increased, but diminished as is indicated by the passage of matter through the internal mucous membrane which is nothing more than a reflection of skin have its action increased when the latter is exposed to an irritating cause, nor is this consistent with the facts of daily observation, for Urine and sweat have long been observed to alternate with each other, and to be ~~relative~~ in an inverse ratio. Whether the same relation exists between the skin and liver is still a matter of dispute but either determination of the question in either way, would not affect the disease which I am considering. I have more in discussion, I mean choose in a general point of view that if heat does operate upon the liver in a different manner from what it does upon the other viscera that the reflex action, or at least here indicated by it would be played so far as respects the whole system, and that even would be considered to be reflex indiscriminately, from all the viscera, independent of the reasoning which might be supposed



Upon this question, ~~could~~ I deem it proper to enter into, I would only add that there are upon record facts of persons who have been exposed to very intense degrees of heat and kept alive alone by the profuse perspiration, but that no cognizance ~~instigation~~ of any inordinance secretion of Urine or bile which ought to have been evacuated agreeable to the Theory, which I am now combating.

For no distant those principles of sympathy which appear to exist and so intimately, to connect the different parts of the system, not to dissipate its effects in the course of its operation, & be evitable its appearance, It is by this that the internal parts are prompted to yield up a part of their ordinary quantity of blood which is thrown out in the form of sweat as a protection to them all. This then is a sympathy upon which is founded a system of economy totally inconsistent with what might be supposed, & and even the whole internal capillary system takes on increased action and thus blindly and happily thrown away in the form of Urine or Skin Heat which



constitute such an effectual protection when deprived  
of through the proper outlet. By this means the internal  
vessels being deprived of their usual quantity of blood  
which as a stimulus of distention is as essential to their  
strength, as exercise to the whole voluntary muscular sys-  
- tem, fall into a state of collapse, lose their elasticity  
and <sup>are</sup> thus rendered unable to sustain even the force of the  
ordinary circulation. & the circulation is thereby prevented  
involuntarily from the effects which are exerted by cold upon  
the human system when applied to the system. In this case  
the blood is forced a great volume and has every assistance of  
nature, more every contraction in its system, the quantity of  
blood is increased, and thus it is - evident a greater quantity  
of blood is contained in the system. The system being  
in a healthy state and the strength of all its organs union  
- present in all consequences would usually but if exposed which  
must result or after having been much debilitated by previous  
suffering is less capable of resistance and also almost inevitably  
succumb. Should the lower be reduced to a state of greatest debility,





What is so rare. Thus if the congestive effusions were to  
be dense, there is to be the lungs labored or should it be  
the tubercles & granules, and it is from this consequence of a  
common cause, that the real tubercular disease has by some authors  
been called tubercle of the tubercles.

This disease is not liable to be confounded with any other  
being always distinguishable by the persistence of the discharges pure  
and more or at least. The progress is sometimes difficult but  
may generally be determined without much difficulty. It differs  
from the common but continues for months or years. The discharges  
do not become less frequent but in greater quantities when  
they do occur, and sometimes more than the natural confidence  
and appearance in other respects, the excitation in the skin  
to some extent runs with a tubercular inclination and gives upon  
the surface we may say through the most sanguine expectations  
of a tubercular issue. But should the stores of the skin machine  
be more more frequent, and numerous in their appearance  
attended with more pain, with an itchy, crusty, winter  
to the touch, much swollen together with collapse of the skin



lance and a general prostration of strength, with thin  
cutary, inebriated or swelling of the testicles, the case will  
most probably terminate fatally. It may however with cer-  
tainty be remarked that our amputation in these cases  
should never be made with that degree of confidence, with  
which the appearance of the case at the time may inspire us  
as experience has shown that in cases where the chances of  
recovery were apparently most desperate patients have unexpectedly  
survived and been completely restored to health, and on the con-  
trary, where an violent abatement of all bad symptoms indicating  
early convalescence, have been succeeded by exacerbations, which  
eventually terminated in death and the destruction of the reputa-  
tion of the Physician.

Examinations after death exhibit all the  
appearances of puerulent inflammation, generally the vessels  
which are exceedingly numerous are much injected, and not  
unfrequently all of the large vessels in a state of modification,  
that frequently there is an effusion of lymph from the lesions  
- & coat by which the different constitutions are agglutinated



to each other, are occasioned by other external communica-  
 tions or disturbances between different portions of the wall.  
 Sometimes also are found numerous collections, of tubercles adhering  
 by broad bases to the mucous coat, with an evident compression  
 of the cavity of the canal. The above appearances are common  
 more particularly to the large intestine, but in addition to this  
 the smaller one and sometimes even the stomach itself exhibit  
 every degree of previous inflammation.

The causes, symptoms and morbid effects  
 being thus amply delineated a correct opinion respecting the  
 proximate cause and pathology of the disease may be easily  
 formed, being simply inflammation of the mucous coat in the  
 commencement and gradually extending itself to the muscular  
 and serous coats of the intestines, blended with some  
 or an increased action in the entire nervous system.

The indications in the treatment appear to be  
 first to remove the exciting cause secondly to arrest action  
 from the first and thirdly, to produce counterirritant action  
 in the system generally. If in the commencement of an attack



There would be much greater objection, with the tongue  
freely fixed an Emetic either of ~~Spasmodic~~ or Tartaric  
of Antimony might be prescribed with advantage. The  
effect of this would not only be to remove any indigestible  
matter which might be remaining in that viscus, but would  
draw the blood from the interior, and thus regulate the  
circulation. This should be succeeded by a purgative of  
a mild nature, consisting either of Epsom salts, Sweet Oil,  
The latter probably should be preferred, as it would lubricate  
the parts in its passage and protect them against any acrid  
matter which may perhaps have been thrown out, & by the  
milder evacuation should be preferred in these cases may be replace  
-ed by the circumstance of their being less constituting, to the  
Gross accumulation of the intestine which is always in an  
inflamed state, and which should it be much increased would  
cause the secretion of mucus to be suppressed, which is one of  
the means instituted to relieve congestion. That the secretion  
mucus of the mucus secretion is very great, may be illustrated  
by the effects which the leastest discharge has upon the





vegels, which furnish the menses fluid, hence in order to, reduce congestion sufficient for the discharge of this latter fluid, the cause which acts as a crasis must be eliminated.

This simple mode of treatment aided by the aid of the part of the patient, will sometimes be competent to the removal of an abscess, at it will not at other times, a suppurative and the arterial system seems much excited to bind its natural action, as is indicated by the hard shodst under the ear of the breast should be called into requisition, blood should be drawn in large quantities at a time, as it is found to afford much greater relief in this way than when taken in smaller quantities, and repeated often. In this way we prevent structural derangement, and seldom incur a Typhoid fever, which appears to be so much considered by some authors. Should this be much Tension and Tension blood should be given either in small quantities internally, or in the form of Enema. From the circumstances also of the air being sometimes caused by a spasmodic contraction of the Muscles and around the cord.



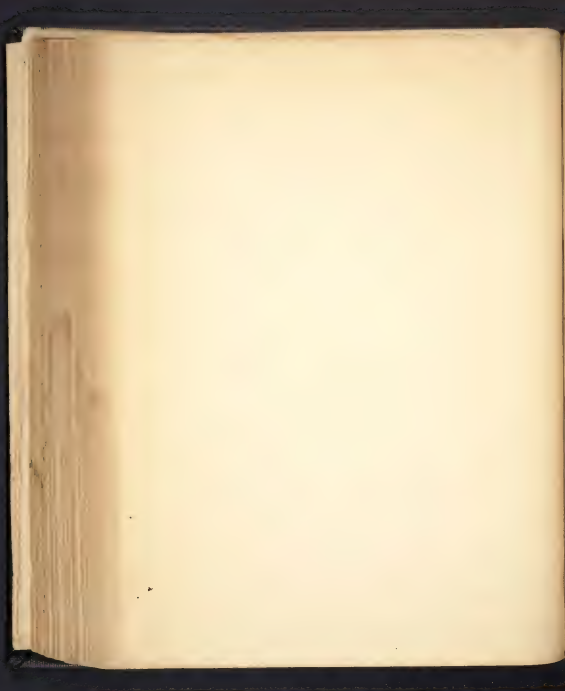
and Scrophulae can be more be repeated with the view  
of promoting their excretion, which is always attended the  
best. The application of Cold to the surface in inflamma-  
tion of any of the Viscera should always be avoided, as it  
never does good except when applied in contact with the in-  
flamed part, but that it is an efficacious remedy when  
applied as an Emmenagogue is the most interesting observa-  
tion to be pretty well established. It acts by determining the  
blood from the part, and <sup>by</sup> communicating a contrifick force  
to the circulation. At this stage of the disease the warm  
bath may be used with considerable advantage, it is one of  
the best promotor means of exciting the healthy action of  
the skin and of bringing on Diaporesis, which is always  
desirable in these affections. To increase this same effect  
Opium powder given at night is one of the best remedies  
and in order to render its effects more permanent it may  
be succeeded, by a combination of Opium, Gum, & Theri-  
acum in small quantities, increasing the proportion of either  
ingredient according to the pre-dominance of the different Symp-



man should this is much I am to learn should be in  
 common, should be this is very and the general attention  
 impeded the system & should be in common,  
 should be the same, should be in common, the  
 maintenance of business should be in common, under  
 such circumstances it is carried by T. Chapman to be  
 exhibited in the or better given under, with the same, but  
 manner, or given it is in common, under the same  
 quantity, or in common, in the stomach to give it off  
 with better care. The maintenance of our material being is  
 carried by T. Chapman as a particular system, it  
 being a summary report of nature to which the original  
 capacities of their nature, but when it is carried  
 in a quantity, sufficient to support the system with abun-  
 dantly it should be in common, or in common, should be  
 should be in common, these various quantities, in common  
 - to in common, or given by attending the system, and  
 giving them more, that is the same, but it is in common  
 more in common, in the same way, but it is in common



that; is the tubercular coat, which can be indicated by  
 the weak point mentioned by the touch of the hand, and  
 sometimes is very evident. It is that the weight of the res-  
 -toring cannot be sustained with comfort, in this case we  
 have Peritonitis complicating the original disease, and  
 it may be now proper to remove the inflammatory action, and  
 then sufficiently reduced to apply blisters, or warm  
 compresses to the abdomen, the blister should be  
 very large so as to cover the whole region, up to the  
 the umbilicus the, in sometimes the very superficial, harsh  
 crust, on the latter stages. It must not at this time  
 lose sight of the throat, which increase in frequency and  
 manifest much more acrimony, to correct this latter  
 property and also at a large, the Stomach must be  
 treated does <sup>not</sup> have, particularly recommended by Dr. J  
 Jackson, who has exhibited it with considerable success  
 in the treatment of the Diphtheria, to remove from  
 the and also to prevent excoriations, injections of fresh  
 milk, either into the Stomach or of considerable quantity.

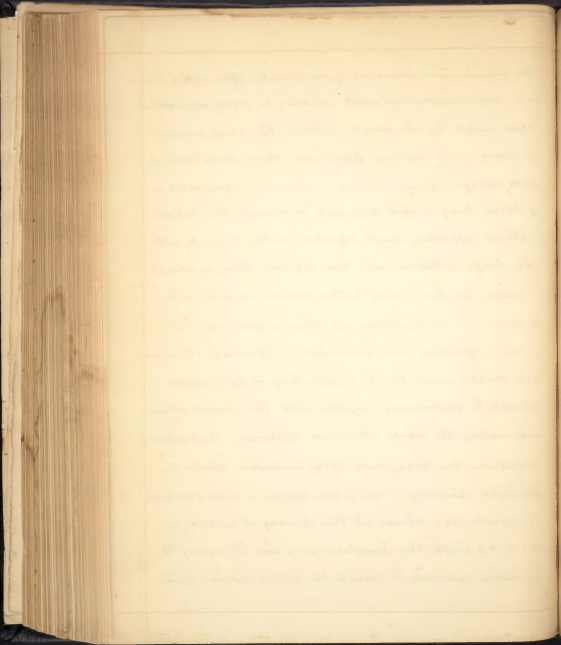




The mucilaginous drinks as Gum Arabic, the slippery Elm  
and Benna dissolved in water should be freely administered

These aided by the lancet constitute the chief remedies  
of many of the Southern physicians, they derive most of  
their alleged specific properties from the circumstance  
of their being a diet sufficient to nourish the patient  
without affording much feculent matter to pass into  
the large intestines and thus increase their excitement

Should the disease thus treated manifest no disposition  
to yield, but the symptoms all become aggravated, with  
general prostration, cold extremities &c. Blesters to the wrists  
and ankles aided by the application of hot Bricks,  
should be continued, together with the flannel rollers  
surrounding the whole chest and abdomen, The Carbamate  
Ammonia, Wine Whey and Spirit of Turpentine should be  
exhibited internally, This latter remedy is said sometimes  
to operate as a charm at this period, it is both a  
local & a diffusible stimulus, and while it relieves the  
capillaries communicates force to the general arterial system



should these measures fail the necessary preparations  
 should be urged to facilitate, which when induced  
 rarely fails to arrest the further progress of the disease

